## IN THE CLAIMS

Please amend the claims as follows:

1. (original) Switched mode power supply assembly (1) comprising a plurality of at least two switched mode power supply modules (10) coupled to each other in a ring-configuration;
each power supply module ($10_i$) comprising synchronisation control means for generating a synchronisation control signal for a next neighbouring module ($10_{i+1}$) and for receiving a synchronisation control signal from a previous neighbouring module ($10_{i-1}$) in order to ensure interleaved operation of all modules.

2. (original) Switched mode power supply assembly (1) according to claim 1, wherein all power supply modules (10) are mutually identical.

3. (original) Switched mode power supply assembly (1) according to claim 1, wherein each power supply module ($10_i$) comprises a target signal input ($16_i$), all target signal inputs of all power supply modules being connected in parallel to one common target signal source ($S_{TARGET}$).

4. (original) Switched mode power supply assembly (1) according to claim 1, wherein each power supply module ($10_i$) comprises a current output ($13_i$), all current outputs of all power supply modules being connected in parallel to one common assembly output (3).

5. (original) Switched mode power supply assembly (1) according to claim 1, wherein each power supply module ($10_i$) comprises a

first supply input ($11_i$) and a second supply input ($12_i$), all first supply inputs of all power supply modules being connected in parallel to one common high voltage supply source ($V_{HIGH}$), and all second supply inputs of all power supply modules being connected in parallel to one common low voltage supply source ($V_{LOW}$).

6.(original) Switched mode power supply assembly (1) according to claim 1, wherein each power supply module ($10_i$) comprises a control input ($14_i$) and a control output ($15_i$), all control inputs ($14_i$; $14_1$) being coupled to a control output ($15_{i-1}$; $15_N$) of a previous neighbouring module ($10_{i-1}$; $10_N$), and all control outputs ($15_i$; $15_N$) being coupled to a control input ($14_{i+1}$; $14_1$) of a next neighbouring module ($10_{i+1}$; $10_1$).

7.(original) Switched mode power supply assembly (1) according to claim 1, wherein each power supply module (10) further comprises a current sensor (67) for generating a measuring signal ($S_M$) representing the output current at said module output (13);
wherein each power supply module (10) further comprises current generating means being capable of operating in a first operative state in which said current generating means generates an output current having positive derivative and being capable of operating in a second operative state in which said current generating means generates an output current having negative derivative;
said current generating means being adapted to switch from its first operative state to its second operative state when a rising measuring signal ($S_M$) becomes equal to a high boundary signal ($S'_{BH}$), and being adapted to switch from its second operative state to its first operative state when a falling measuring signal ($S_M$) becomes equal to a low boundary signal ($S'_{BL}$);

wherein each power supply module (10) further comprises a hysteresis control stage (70).

8.(original) Switched mode power supply assembly (1) according to claim 7, wherein each power supply module (10) comprises a boundary generator (20) having an input (21) coupled to a target signal input (16), adapted to generate a high boundary signal ($S_{BH}$) at a first boundary generator output (22) and to generate a low boundary signal ($S_{BL}$) at a second boundary generator output (23) on the basis of a target signal ($S_{TARGET}$) received at said input (21); wherein said hysteresis control stage (70) is adapted to control a difference between a rising measuring signal ($S_M$) and said high boundary signal ($S_{BH}$) and adapted to control a difference between a falling measuring signal ($S_M$) and said low boundary signal ($S'_{BL}$).

9.(original) Switched mode power supply assembly (1) according to claim 8, wherein said hysteresis control stage (70) has a first input coupled to the first boundary generator output (22) and a second input coupled to the second boundary generator output (23) of the boundary generator (20) for receiving the high boundary signal ($S_{BH}$) and the low boundary signal ($S_{BL}$), respectively, and having a first output for providing a hysteresis-controlled high boundary signal ($S'_{BH}$) and a second output for providing a hysteresis-controlled low boundary signal ($S'_{BL}$), respectively.

10.(original) Switched mode power supply assembly (1) according to claim 9, wherein said hysteresis control stage (70) comprises a first ramp voltage generator (71) for generating a first ramp voltage ($V_{RH}$) having an increasing magnitude, and means (73) for reducing the high boundary signal ($S_{BH}$) by the magnitude of said first ramp voltage ($V_{RH}$).

11.(original) Switched mode power supply assembly (1) according to claim 9, wherein said hysteresis control stage (70) comprises a second ramp voltage generator (72) for generating a second ramp voltage ($V_{RL}$) having an increasing magnitude, and means (74) for increasing the low boundary signal ($S_{BL}$) by the magnitude of said second ramp voltage ($V_{RL}$).

12.(original) Switched mode power supply assembly (1) according to claim 7, wherein each power supply module ($10_i$) comprises a control input ($14_i$) and a control output ($15_i$), each control input ($14_i$; $14_1$) being coupled to a control output ($15_{i-1}$; $15_N$) of a previous neighbouring module ($10_{i-1}$; $10_N$), and each control output ($15_i$; $15_N$) being coupled to a control input ($14_{i+1}$; $14_1$) of a next neighbouring module ($10_{i+1}$; $10_1$);
each power supply module (10) further being adapted to generate at its power supply output (15) a first control output signal ($S_{C,OUT}$) for indicating the moment in time (t1) when said current generating means switches from its first operative state to its second operative state, and to generate a second control output signal ($S_{C,OUT}$) for indicating the moment in time (t2) when said current generating means switches from its second operative state to its first operative state.

13.(original) Switched mode power supply assembly (1) according to claim 12, wherein the hysteresis control stage (70) comprises a first adder (73) having one input coupled to the first output (22) of the boundary generator (20) and having another input coupled to an output of a ramp voltage generator (71) which is triggered by the first control input received at the control input (14) of the corresponding power supply module (10), the first adder (73) having

its output coupled to the first output of the hysteresis control stage (70) for providing the hysteresis-controlled high boundary signal ($S'_{BH}$).

14.(original) Switched mode power supply assembly (1) according to claim 12, wherein the hysteresis control stage (70) comprises a second adder (74) having one input coupled to the second output (23) of the boundary generator (20) and having another input coupled to an output of a ramp voltage generator (72) which is triggered by the second control input received at the control input (14) of the corresponding power supply module (10), the second adder (74) having its output coupled to the second output of the hysteresis control stage (70) for providing the hysteresis-controlled low boundary signal ($S'_{BL}$).

15.(original) Switched mode power supply assembly (1) according to claim 7, wherein said current generating means comprise:
two controllable switches (61, 62) coupled in series between a first supply input (11) and a second supply input (12), a node (A) between said switches being coupled to said module output (13);
a switch driver (50) having outputs (52, 53) coupled to control inputs of respective switches (61, 62), the switch driver (50) being capable of operating in a first operative state in which it generates its control output signals such that the second switch (62) is non-conductive while the first switch (61) is in its conductive state, and being capable of operating in a second operative state in which it generates its control output signals such that the first switch (61) is non-conductive while the second switch (62) is in its conductive state;
a window comparator (30) having a high boundary input (32) and a low boundary input (33), a control output (34) coupled to a control

input (51) of said switch driver (50), and a measuring signal input (36) coupled to receive said measuring signal ($S_M$) from said current sensor (67);
wherein the window comparator (30) is adapted to generate a first control signal commanding said switch driver (50) to enter its first operative state when said falling measuring signal ($S_M$) becomes equal to the signal level ($S'_{BL}$) at its low boundary input (33), and to generate a second control signal commanding said switch driver (50) to enter its second operative state when said rising measuring signal ($S_M$) becomes equal to the signal level ($S'_{BH}$) at its high boundary input (32).

16. (original) Switched mode power supply assembly (1) according to claim 15, wherein said window comparator (30) has its inputs (32, 33) coupled to the outputs of the hysteresis control stage (70).

17. (original) Switched mode power supply assembly (1) according to claim 7, wherein said current generating means comprise:
a controllable switch (61; 62) and a diode coupled in series between a first supply input (11) and a second supply input (12), a node (A) between said switch and said diode being coupled to said module output (13);
a switch driver (50) having an output (52; 53) coupled to the control input of the switch (61; 62), the switch driver (50) being capable of operating in a first operative state in which it generates its control output signal such that the switch (61; 62) is in its conductive state, and capable of operating in a second operative state in which it generates its control output signal such that the switch (61; 62) is non-conductive;
a window comparator (30) having at least one boundary input (32), a

control output (34) coupled to a control input (51) of said switch driver (50), and a measuring signal input (36) coupled to receive said measuring signal ($S_M$) from said current sensor (67); wherein the window comparator (30) is adapted to generate a control signal for said switch driver (50) when said measuring signal ($S_M$) becomes equal to the signal level ($S'_{BH}$) at its at least one boundary input (32).

18. (currently amended) Switched mode power supply assembly (1) according to claim 1~~any of the previous claims~~, wherein the power supply modules are implemented as DC/DC converter modules.

19. (currently amended) Switched mode power supply assembly (1) according to claim 1~~any of the previous claims~~, wherein the power supply modules are implemented as DC/AC inverter modules.

20. (currently amended) Solar cell assembly, comprising a boost converter for up-converting the output voltage of the solar cells, having its output voltage coupled to a DC/AC inverter, wherein either said boost converter or said inverter, or both, comprise a switched mode power supply assembly (1) according to claim 1~~any of the previous claims~~.

21. (currently amended) Driver for driving a lamp such as a gas discharge lamp, comprising a switched mode power supply assembly (1) according to claim 1 ~~any of the previous claims~~ as a DC/AC inverter for generating supply current for the lamp.

22. (currently amended) Actuator for a motion control apparatus, comprising a switched mode power supply assembly (1) according to claim 1 ~~any of the previous claims~~.